



Chicago Flu Update



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April 10, 2020

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News & Updates

In Chicago, reported laboratory confirmed influenza continues to decrease. However, the percentage of emergency department visits due to influenza-like illness (ILI) remains high compared to previous seasons; this is likely due to the COVID-19 pandemic and changes in healthcare seeking behavior. CDC estimates so far this season there have been at least 39 million flu illnesses, 410,000 hospitalizations and 24,000 deaths from flu.¹ Vaccination is the best way to protect against influenza infection and all Chicagoans six months and older are encouraged to get vaccinated every year. Chicagoans should ask their healthcare provider or pharmacist about vaccine availability when feasible. [CDPH Walk-in Immunization Clinics](#)² are closed until further notice.

What is the risk?

Currently, the risk of influenza infection continues to decrease.

Are severe cases of influenza occurring?

For the week of March 29-April 4, 2020, no influenza-associated ICU hospitalizations were reported (Figure 1).

Since September 29, 2019, 475* influenza-associated ICU hospitalizations have been reported; 368 (77%) were positive for influenza A (8 H3N2, 122 H1N1pdm09, 238 unknown subtype [subtyping not performed or not all subtypes tested]) and 107 (23%) were positive for influenza B. The median age of influenza A cases is 55 years and the median age of influenza B cases is 37 years (overall range of 1 month-96 years); three pediatric deaths were reported and 14 outbreaks in long-term care facilities; selected attributes are summarized in Table 1. *total case counts may change as additional information is received.

Table 1. Selected attributes of influenza-associated intensive care unit hospitalizations reported for Chicago residents during the 2019-2020 season, October-May.

Age Group*	#	%†	Sex	#	%
0-4	80	17	Male	246	52
5-17	29	6	Female	228	48
18-24	17	4	Med. Cond./Complication‡		
25-49	81	17	Lung Disease	159	33
50-64	139	29	Cardiac Disease	142	30
≥65	128	27	Diabetes	109	23
Race/Ethnicity			Ventilator Support	106	22
NH-White	107	23	Reported Deaths§	19	4
NH-Black	258	54	Treatment/Vaccination‡		
Hispanic	87	18	Reported Antiviral Tx	380	80
Asian/Other	22	5	Reported Flu Shot	142	30

*One patient missing age and race/ethnicity at time of report; † Percentages may not add up to 100 due to rounding; ‡ As reported in INEDSS (Illinois National Electronic Disease Surveillance System); § Date of death occurring within one week of positive influenza test among reported influenza-associated ICU hospitalizations.

Which influenza strains are circulating?

Data on influenza virus test results are reported by Chicago laboratories performing influenza RT-PCR. For the week of March 29-April 4, 2020, 6 of the 1,092 (<1%) reported specimens that were tested for influenza were positive; 5 typed as influenza A (0 H3N2, 5 H1N1pdm09, and 0 unknown subtype [subtyping not performed or not all subtypes tested]) and 1 typed as influenza B (Figure 2).

Since September 29, 2019, 6,644 of the 39,082 (17%) reported specimens that were tested for influenza have been positive; 4,155 (63%) typed as influenza A (68 H3N2, 1,323 H1N1pdm09, and 2,764 unknown subtype [subtyping not performed or not all subtypes tested]) and 2,489 (37%) typed as influenza B. The cumulative number of specimens testing positive for influenza so far this season is higher than last season (11%) but similar to the 2017-2018 season (18.2%) for the same time period.[§]

§ Reported percentages represent final end of season data and may differ from previously published reports. All data are preliminary and may change as more reports are received.



Figure 1. Number of influenza-associated ICU hospitalizations reported for Chicago residents, for the current season (2019-2020) and previous season (2018-2019), October-May.

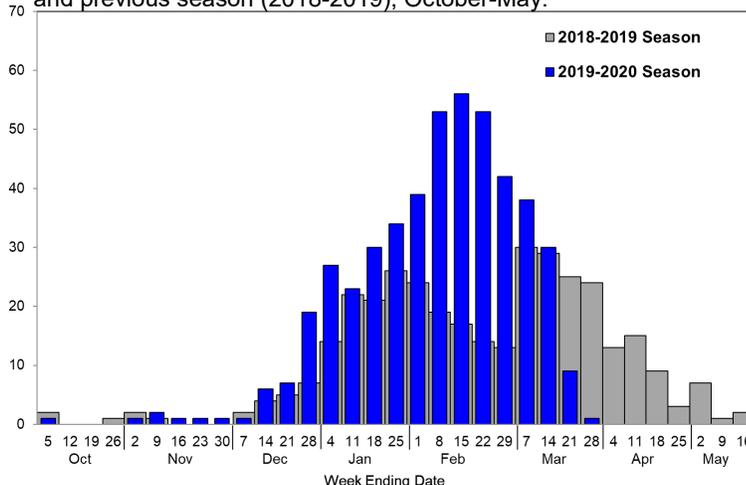
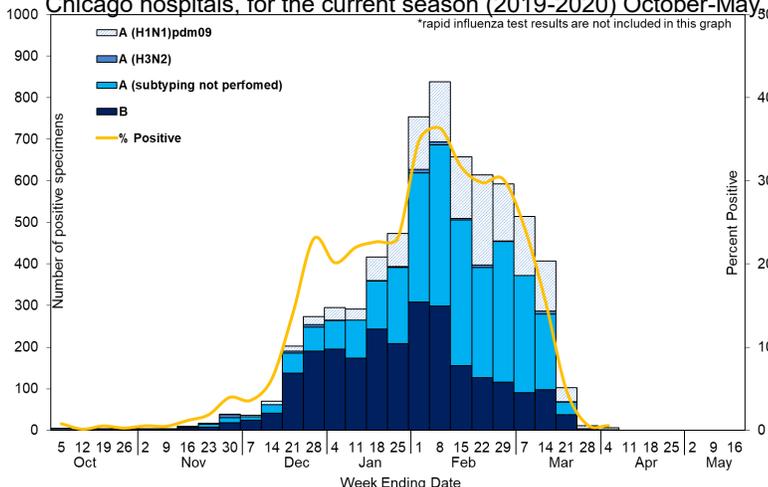


Figure 2. Percent of specimens testing positive (by RT-PCR) for influenza by subtype as reported by local laboratories serving Chicago hospitals, for the current season (2019-2020) October-May.[§]



¹ <https://www.cdc.gov/flu/about/burden/preliminary-in-season-estimates.htm>;

² https://www.chicago.gov/city/en/depts/cdph/supp_info/health-protection/immunizations_walk-inclinics.html

How much influenza-like illness is occurring?

Several outpatient clinics throughout Chicago participate in CDC's Influenza-like Illness Surveillance Network (ILINet) by reporting on a weekly basis the total number of outpatient clinic visits, and of those visits, the number with influenza-like illness (ILI). For the week of March 29-April 4, 2020, 60 of the 2,989 (2%) reported outpatient clinic visits were due to influenza-like illness (**Figure 3**).

In addition to ILINet, ESSENCE is an electronic syndromic surveillance system that utilizes the chief complaints of patients visiting emergency departments to monitor for influenza-like illness. Currently, ESSENCE captures nearly every emergency department visit in the city on a daily basis. For the week of March 29-April 4, 2020, 1,011 of the 15,488 (6.5%) total emergency department visits were due to influenza-like illness (**Figure 4**).

Figure 5 represents the percentage of emergency department visits due to influenza-like illness aggregated by Chicago patient zip codes. For the week of March 29-April 4, 2020, 48 of 59 (81%) zip codes had moderate to high ILI activity levels; this is higher than last season where 68% of zip codes were at moderate to high levels for the same time period and the 18th consecutive week where over half of zip codes had moderate to high ILI activity levels.

Where can I get more information?

The Centers for Disease Control and Prevention's [FluView](#)³ report provides national updates and trends related to the intensity of influenza activity across the United States, as well as detailed information on antiviral resistance, severity of illness, and other topics. Updates specific to [Illinois](#)⁴ and [Suburban Cook County](#)⁵ are also available online. Current and archived issues of the *Chicago Flu Update* can be found on the CDPH website section [Current Flu Situation in Chicago](#)⁶.

Reporting Information

Illinois Department of Public Health recently issued [Influenza Testing and Reporting Guidance](#)⁷. The Chicago Department of Public Health has previously issued guidance on [reporting influenza-associated ICU hospitalizations](#)⁸. Healthcare facilities can report cases to the Chicago Department of Public Health via the Illinois National Electronic Disease Surveillance System (INEDSS)⁹. For more information contact: SyndromicSurveillance@cityofchicago.org

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Figure 3. Percent of medically-attended outpatient visits attributed to influenza-like illness as reported by ILINet facilities, Chicago, by week for the current season (2019-2020) and previous two seasons, October-May.

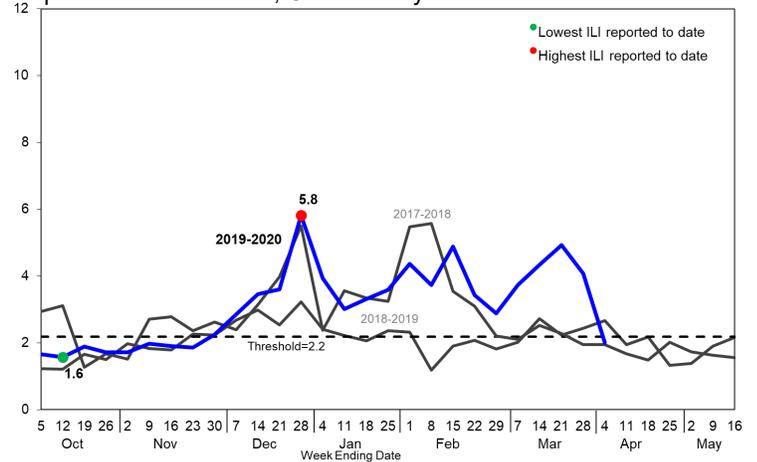


Figure 4. Percent of emergency department visits attributed to influenza-like illness for Chicago zip codes based on chief complaint data submitted to ESSENCE, Chicago, by week, for the current season (2019-2020) and previous two seasons, October-May.

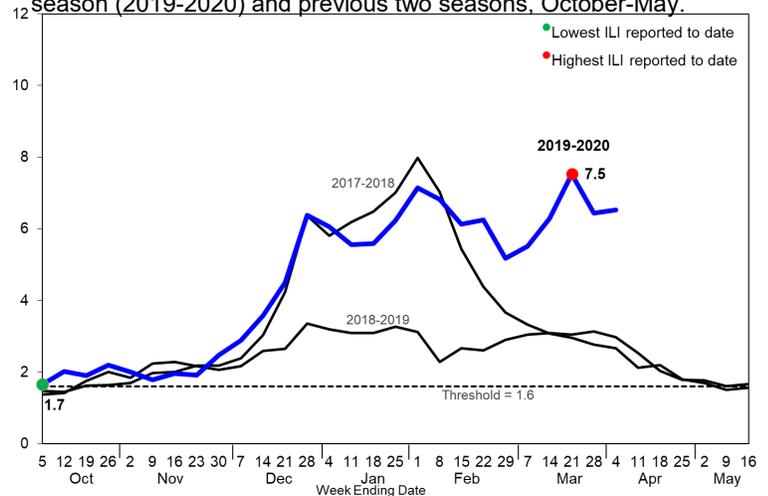
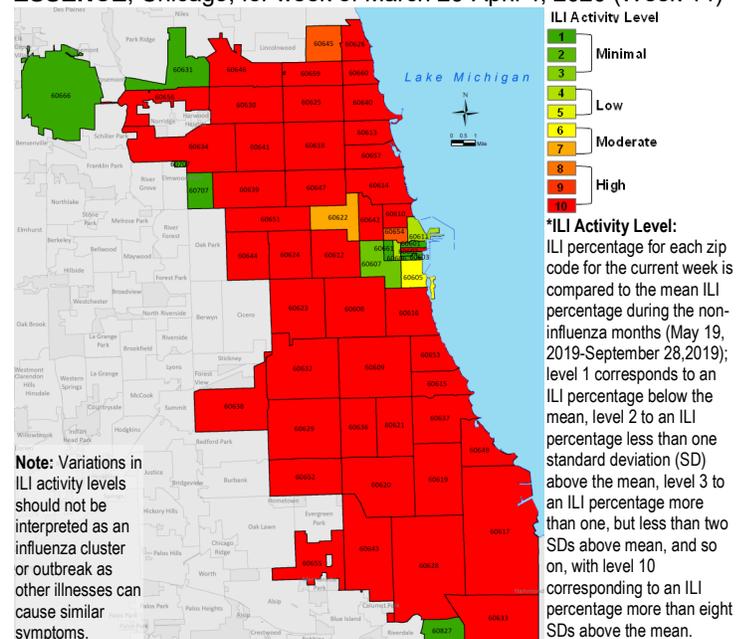


Figure 5. Influenza-like Illness (ILI) activity level by Chicago patient zip codes determined by chief complaint data submitted to ESSENCE, Chicago, for week of March 29-April 4, 2020 (Week 14)



All data are preliminary and may change as more reports are received.

³ <http://www.cdc.gov/flu/weekly/index.htm>, ⁴ <http://dph.illinois.gov/topics-services/diseases-and-conditions/influenza/influenza-surveillance>, ⁵ <https://ccdphcd.shinyapps.io/influenza/>;

⁶ https://www.chicago.gov/city/en/depts/cdph/supp_info/health-protection/current_flu_situationinchicago.html;

⁷ www.dph.illinois.gov/sites/default/files/publications/20190916idphohp-annual-flu-testing.pdf ;

⁸ <https://www.chicagohan.org/documents/14171/39923/Reporting+Influenza-Associated+ICU+Hospitalizations/bc2f49b2-cf74-487c-9441-0b0a930e4b41>; ⁹ <httpsdph.partner.illinois.gov/>